

# Identification Key to Campbell Island Freshwater Invertebrates

McMurtrie, Sinton & Winterbourn (2014)



## *Rungaperla longicauda* (Illies, 1963) INFORMATION SHEET

### Classification

Phylum:	Arthropoda
Class:	Insecta
Order:	Plecoptera
Family:	Griopterygidae
Genus:	<i>Rungaperla</i>
Specific name:	<i>longicauda</i>
<b>Common name:</b>	stonefly
<b>Original combination:</b>	<i>Apteryoperla longicauda</i> Illies, 1963

### Distinguishing Features

- Larvae are moderately flattened with prominent thoracic legs (Fig. 1).
- Antennae long (Fig. 1).
- Two filamentous cerci (tails) which are about as long as the last 6 abdominal segments (Fig. 1).
- A rosette of anal gills is present between the bases of the cerci (Fig. 1).
- Larvae can be up to 24 mm long.

### Comments

A second species *Rungaperla campbelli* (Illies) is semi-terrestrial, living in damp habitats but not under water (Illies, 1963). Nevertheless it was found in stream samples by Joy & Death (2000). Its cerci are much shorter than those of *R. longicauda* (i.e., about as long as the last two abdominal segments) and the gills are rudimentary. Maximum length of *R. campbelli* larvae is about 20 mm.

### Original Description

The following is a direct excerpt from Illies (1963) for *Apteryoperla longicauda*, including figure:

Length of body: Male ca. 20mm; female ca. 22-24mm

Only known in larval stage. Similar to *A. campbelli* n.sp. in the colour pattern, but distinctly different in length of cerci, size of body, and other details as well as in the bionomics. Body brownish or dark grey. Colour pattern of the abdominal nota similar to those of *A. campbelli* n.sp., but the yellow stripes are smaller, shorter, and less distinct. On the tenth tergite, four black spots in a semi-circle surround a light spot on the front margin of the segment (see fig 7a).



FIGURE 1. *Rungaperla longicauda* whole animal

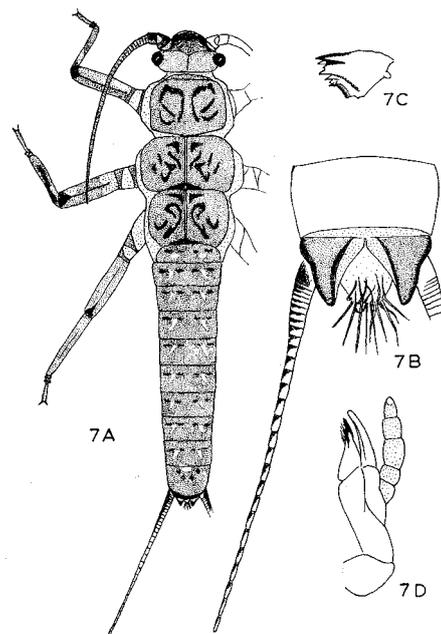


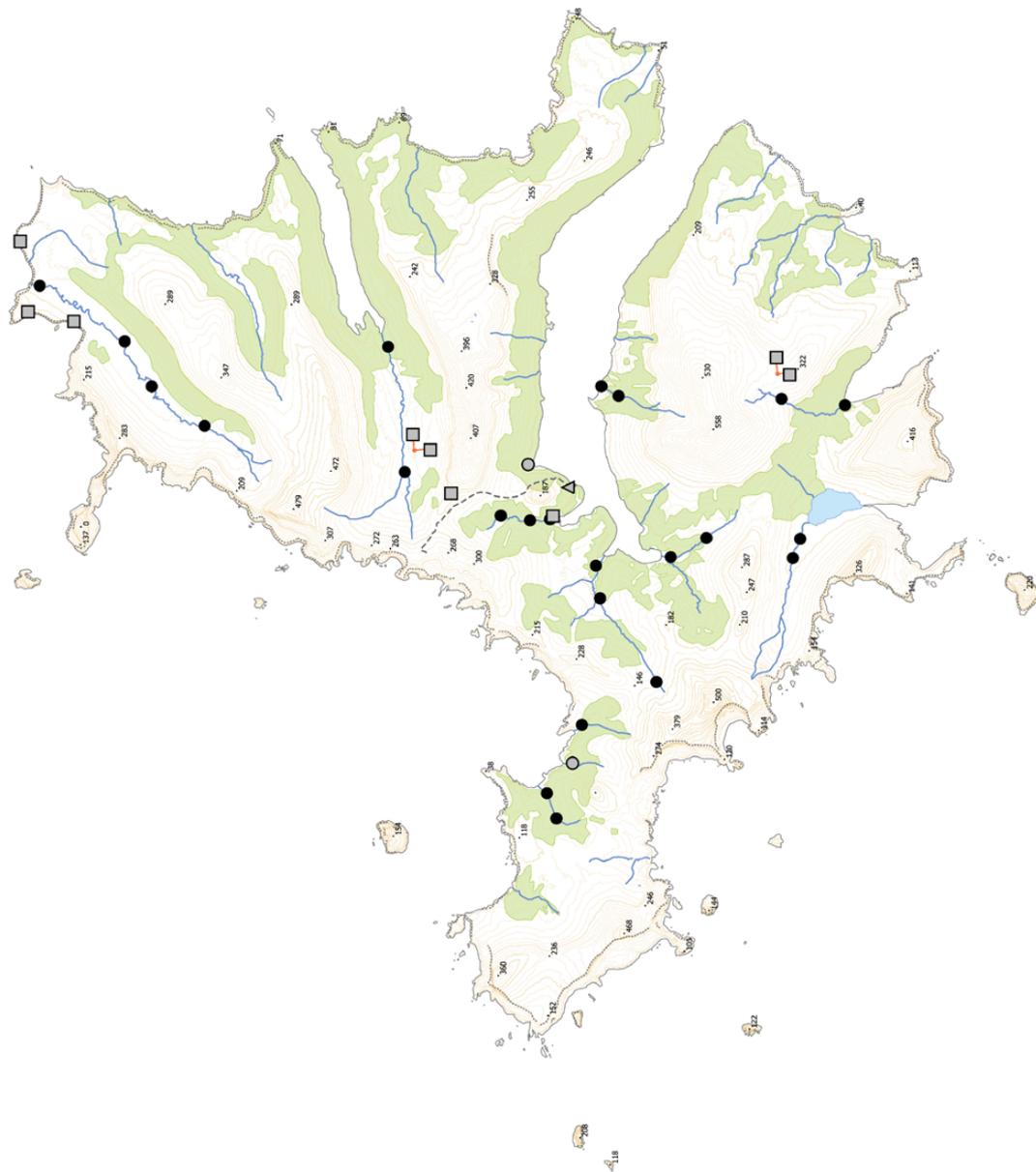
FIG. 7.—Larva of *Apteryoperla longicauda* n.sp. (a) Fully grown larva, dorsal view; (b) tip of abdomen of same specimen, ventral view; (c) left mandible, ventral view; (d) left maxilla, ventral view.

The cerci remarkably well developed, as long as the last six abdominal segments (5-6mm), consisting of about 35 segments. Gill filaments rather long and numerous (see fig 7b). mouth parts as shown in fig 7c,d. The tip of the last segment of the maxillary palp is distinctly light.

## Biogeographic Information

Presence/absence on streams, tarns, and a seepage sampled on Campbell Island.

Distribution map based on surveys undertaken by EOS Ecology during the 2010–11 Campbell Island Bicentennial Expedition ([www.campbellisland.org.nz](http://www.campbellisland.org.nz)). Distribution data © EOS Ecology, 2013.



<b>TARN SITES</b>	Present	Black square
	Absent	White square
<b>STREAM SITES</b>	Present	Black circle
	Absent	White circle
<b>SEEP SITE</b>	Present	Black triangle
	Absent	White triangle
	Cliff edge	Dashed line
	Tracks	Dotted line
	Height points	370
	Lakes	Blue area
	Streams	Blue line
	Scrub	Green area

Scale = 1 km

New Zealand Transverse Mercator  
New Zealand Geodetic 2000  
Created on: 3 December 2013  
Created by: Kirsty Brennan

**Rungaperla longicauda Distribution**  
**CAMPBELL ISLAND**  
December 2010–February 2011

Produced by:  
EOS Ecology  
Campbell Island Bicentennial Expedition  
Project name:  
06033-EOS01  
Project no.:  
Shelley McMurtrie  
Project lead:  
[www.eosecology.co.nz](http://www.eosecology.co.nz)



## References & Further Reading

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## How to Cite this Information Sheet

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